CLAIMS

1. A method for graphically presenting characteristics of data traffic on a distributed computer network, comprising:

monitoring traffic on said network;

selecting a characteristic of said traffic for display;

presenting said characteristic in a graphical format, said graphical format representing said network in response to said monitoring, said network represented as nodes connected by lines, said lines representing traffic flow between nodes; and

displaying a property of at least one line of said lines, said property indicating a value of said characteristic.

2. The method as in claim 1, further comprising:

obtaining said value from said monitoring during a selected time interval.

3. The method as in claim 1, further comprising:

displaying a sequence of said images, to display changes in said characteristics during a sequence of time intervals.

4. The method as in claim 1, further comprising:

using a width of said at least one line as said property.

1 5. The method as in claim 1, further comprising:

2 using a color of said at least one line as said property.

1 6. The method as in claim 1, further comprising:

2 using an arrow drawn on said at least one line as said property.

1 7. The method as in claim 1, further comprising:

2 using a length of said at least one line as said property.

1 8. The method as in claim 1, further comprising:

2 using a density of said at least one line as said property.

1 9. The method as in claim 1, further comprising:

2 using a visual characteristic of said at least one line as said property.

1 10. The method as in claim 1, further comprising:

displaying a filtering expression in a graphical user interface;

selecting, from said graphical user interface, records from network information files to display said characteristic of said traffic.

11. The method as in claim 10, further comprising:

calculating parameters that are associated with the records selected from network files and storing the parameters in a local file.

12. The method as in claim 1, further comprising:

displaying the characteristic as any graphical black and white or color image capable of being displayed on a data visualization system coupled to said computer.

13. The method as in claim 1, further comprising:

using a filtering program to select records in network information files that meet selected filtering criteria.

14. The method as in claim 13, further comprising:

compiling the appropriate records from network information files during specified time intervals, each compiled record meeting at least one selected filtering criterion.

15. The method as in claim 14, further comprising:

calculating data that represent the compiled records, and storing the data in a file.

16. The method as in claim 1, further comprising:

displaying a map of the network topology and overlaying the map with moving images that graphically portray the stored data, the moving images changing with time to reflect changes in the underlying data.

17. The method of claim 1, further comprising:

including a time interval criterion which indicates how often to compile and package information from the network information files.

18. The method of claim 1, further comprising:

displaying a network activity for a period of time within a starting time and an ending time specified within a filtering criteria.

19. A data visualization apparatus for graphically presenting characteristics of data traffic on a distributed computer network, comprising:

means for monitoring traffic on said network;

means for selecting characteristics of said traffic for display;

means for presenting said characteristics in a graphical format, said graphical format representing said network in response to said monitoring, said network represented as nodes connected by lines, said lines representing traffic flow between nodes; and

means for displaying a property of at least one line of said lines, said property indicating a value of said characteristics.

20. The apparatus as in claim 19, further comprising:

means for obtaining said value from said monitoring during a selected time interval.

21. The apparatus as in claim 19, further comprising:

means for displaying a sequence of said images, to display changes in said characteristics during a sequence of time intervals.

22. The apparatus as in claim 19, further comprising:

means for using a width of said at least one line as said property.

1 23. The apparatus as in claim 19, further comprising:

2 means for a using a color of said at least one line as said property.

1 24. The apparatus as in claim 19, further comprising:

2 means for using an arrow drawn on said at least one line as said property.

1 25. The apparatus as in claim 19, further comprising:

2 means for using a length of said at least one line as said property.

1 26. The apparatus as in claim 19, further comprising:

2 means for using a density of said at least one line as said property.

1 27. The apparatus as in claim 19, further comprising:

2 means for using a visual characteristic of said at least one line as said property.

1 28. The apparatus as in claim 19, further comprising:

2 means for displaying a filtering expression in a graphical user interface;

means for selecting, from said graphical user interface, records from network information files to display said characteristic of said traffic.

29. The apparatus as in claim 28, further comprising:

means for calculating parameters that are associated with the records selected from network files and storing the parameters in a local file.

30. The apparatus as in claim 19, further comprising:

means for displaying the characteristic as any graphical black and white or color image capable of being displayed on a data visualization system coupled to said computer.

31. The apparatus as in claim 19, further comprising:

means for using a filtering program to select records in network information files that meet selected filtering criteria.

32. The apparatus as in claim 31, further comprising:

means for compiling the appropriate records from network information files during specified time intervals, each compiled record meeting at least one selected filtering criterion.

33. The apparatus as in claim 32, further comprising:

means for calculating data that represent the compiled records, and storing the data in a file.

34. The apparatus as in claim 19, further comprising:

means for displaying a map of the network topology and overlaying the map with moving images that graphically portray the stored data, the moving images changing with time to reflect changes in the underlying data.

35. The apparatus as in claim 19, further comprising:

means for including a time interval criterion which indicates how often to compile and package information from the network information files.

36. The apparatus as in claim 19, further comprising:

means for displaying a network activity for a period of time within a starting time and an ending time specified within a filtering criteria.

37. A data visualization apparatus for graphically presenting characteristics of data traffic on a distributed computer network, comprising:

a computer to monitor traffic on said network;

a graphical user interface to select a characteristic of said traffic for display;

a visualization system to present said characteristics in a graphical format, said graphical format representing said network in response to said monitoring, said network represented as nodes connected by lines, said lines representing traffic flow between nodes; and

instructions in said computer to display a property of at least one line of said lines, said property indicating a value of said characteristics.

38. The apparatus as in claim 37, further comprising:

instructions to execute in said computer to obtain said value from said monitoring during a selected time interval.

39. The apparatus as in claim 37, further comprising:

instructions to execute in said computer to display a sequence of said images, to display changes in said characteristics during a sequence of time intervals.

40. The apparatus as in claim 37, further comprising:

instructions to execute in said computer to use a width of said at least one line as said property.

41. The apparatus as in claim 37, further comprising:

instructions to execute in said computer to use a color of said at least one line as said property.

42. The apparatus as in claim 37, further comprising:

instructions to execute in said computer to use an arrow drawn on said at least one line as said property.

43. The apparatus as in claim 37, further comprising:

instructions to execute in said computer to use a length of said at least one line as said property.

44. The apparatus as in claim 37, further comprising:

instructions to execute in said computer to use a density of said at least one line as said property.

45. The apparatus as in claim 37, further comprising:

instructions to execute in said computer to use a visual characteristic of said at least one line as said property.

46. The apparatus as in claim 37, further comprising:

instructions to execute in said computer to display a filtering expression in a graphical user interface;

instructions to execute in said computer to select, from said graphical user interface, records from network information files to display said characteristic of said traffic.

47. The apparatus as in claim 46, further comprising:

instructions to execute in said computer to calculate parameters that are associated with the records selected from network files and storing the parameters in a local file.

48. The apparatus as in claim 37, further comprising:

instructions to execute in said computer to display the characteristic as any graphical black and white or color image capable of being displayed on a data visualization system coupled to said computer.

49. The apparatus as in claim 37, further comprising:

instructions to execute in said computer to use a filtering program to select records in network information files that meet selected filtering criteria.

50. The apparatus as in claim 49, further comprising:

instructions to execute in said computer to compile the appropriate records from network information files during specified time intervals, each compiled record meeting at least one selected filtering criterion.

51. The apparatus as in claim 50, further comprising:

instructions to execute in said computer to calculate data that represent the compiled records, and storing the data in a file.

52. The apparatus as in claim 37, further comprising:

instructions to execute in said computer to display a map of the network topology and overlaying the map with moving images that graphically portray the stored data, the moving images changing with time to reflect changes in the underlying data.

53. The apparatus as in claim 37, further comprising:

instructions to execute in said computer to include a time interval criterion which indicates how often to compile and package information from the network information files.

54. The apparatus as in claim 37, further comprising:

instructions to execute in said computer to display a network activity for a period of time within a starting time and an ending time specified within a filtering criteria.

55. A computer readable media, comprising:

said computer readable media having instructions written thereon for execution on a computer for the practice of the method of claim 1.

56. Electromagnetic signals propagating on a computer network, comprising:

said electromagnetic signals carrying instructions for execution on a computer for the practice of the method of claim 1.